

ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for computing an absolute difference of two vectors of numbers. In one aspect of the invention, a method for execution by a microprocessor in response to receiving a single instruction includes: receiving a first plurality of numbers and a second plurality of numbers; and generating simultaneously a third plurality of numbers, each of which is an absolute difference between a number in the first plurality of numbers and a number in the second plurality of numbers. The above operations are performed in response to the microprocessor receiving the single instruction.